

## REMARKS

### I. PENDING CLAIMS AND SUPPORT FOR AMENDMENTS

Upon entry of this amendment, claims 1-13 will be pending in this application.

Applicants have amended claim 1 to clarify that the cap assembly contains a ledge that forces the cover off of the vessel when the cap assembly is counter-rotated. Support for this amendment can be found in the specification at page 7, lines 17-23 and page 8, lines 10-16.

Claim 12 has been amended to clarify that loading of the cover occurs by contact between the cap and the cover (at the periphery of the cover), and unloading of the cover occurs by contact between the ledge and the periphery of the cover. More particularly, loading forces (forces that hold the cover against the wall, effectively sealing the interior volume) are distributed around the periphery of the cover. In addition, unloading forces (forces that lift the cover away from the wall, effectively opening the interior volume of the chamber), which allow the user access to the interior of the device (e.g., to change or replace any media disposed therein) are also distributed around the periphery of the cover. Support for this amendment can be found in the specification at page 3, line 18 to page 4, line 2.

No new matter has been added.

### II. ANTICIPATION REJECTION

In paragraph 2 of the Office action, the Examiner has rejected claims 1-6 and 10-13 under 35 U.S.C. § 102(b) as anticipated by Messinger et al. (U.S. Patent No.

4,617,117). Applicants respectfully traverse this rejection and request reconsideration and withdrawal thereof.

First, despite the Examiner's allegations, it is physically impossible for the threads (18) of the Messinger et al. jack ring to lift removable cover (4) at the periphery thereof, because retaining screw and central boss (25) will have lifted the cover (4) from the device long before the threads (18) approach cover (4) (in fact, they will never reach cover (4) because it will have already been lifted from the device by the retaining screw). The portion of the Messinger et al. disclosure cited by the Examiner, in fact, supports this interpretation:

When the removable cover is to be separated from the housing to gain access to the chamber 2, the top cover 16 is simply rotated off the housing. When this is done the cover 16 engages the flange 28 of the cover retaining screw 27, and lifts the removable cover 4 up and away from the housing. When the chamber is to be sealed off again, the operation is repeated, in reverse order.

Messinger et al., col. 5, lines 52-59. Messinger et al. makes abundantly clear that force is applied at the retaining screw 27, not at the periphery of the removable cover 4, when the cover is lifted from the chamber. Perhaps the Examiner's confusion on this point results from the failure of Messinger et al. to properly label flange 28 in Figure 2. However, inspection of Figure 2 makes clear what is occurring mechanically, and Applicants should not be penalized for deficiencies in the references that the Examiner chooses to cite, in any event.

While Applicants disagree with the Examiner's analysis in the Office action, they submit that, with the current amendment, it should be abundantly clear that

Messinger et al. does not anticipate Applicants' claims. The claims make clear that the cap assembly contains a ledge which forces the cover off of the device when the cap assembly is counter-rotated or unscrewed. Messinger et al. does not disclose or suggest such a ledge.

Because Messenger et al. fail to disclose all of the elements of Applicants' claims, this reference fails to anticipate any of the claims, and the Examiner's rejection should be withdrawn.

### III. OBVIOUSNESS REJECTION

In paragraph 6 of the Office action, the Examiner has rejected claims 7-9 under 35 U.S.C. § 103(a) as obvious over Messenger et al. in view of Cooper (U.S. Patent No. 4,316,801). Applicants respectfully traverse this rejection and request reconsideration and withdrawal thereof.

As explained above, Messenger et al. does not disclose a device where both loading and unloading forces are exerted predominantly at the periphery of the cover. The Examiner again asserts that, even were the central boss and retaining screw of Messinger et al. removed, the threads (18) of the jack ring would somehow remove cover (4) from the device of Messinger et al. This position is (1) completely unsupported by any disclosure in Messinger et al. and (2) flies in the face of the explicit explanation in Messinger et al. of how their device works, contained at column 5, lines 52-59.

If the central boss and retaining screw of Messinger et al. are eliminated, there is no connection between cover (4) and the jack ring. The threads (18) of the jack ring will not function to remove the cover; their inner diameter must be larger than the outer diameter of the cover in order for the jack ring to clear the cover and be removable from the device. This is what is illustrated in the drawing figures of Messinger et al., and the Examiner has not provided any motivation whatsoever for disregarding this explicit teaching of the Messinger et al. reference.

Nevertheless, as Applicants have explained above, Messinger et al. does not teach or suggest a cap assembly having a ledge that forces the cover off of the vessel when the cap assembly is counter-rotated or unscrewed.

Cooper et al. does not cure this deficiency. As explained in Applicants' previous response, Cooper et al. provides no mechanism for applying an unloading force to the device: when the device is to be separated, jack ring 10 is simply unscrewed, and gravity causes the bowl 3 to separate from filter head 1. Thus, combining the teachings of Cooper et al. with those of Messenger et al. would actually teach away from the claimed invention: one of ordinary skill in the art would simply turn the device of Messenger et al. upside down and allow the cover to simply fall away from the housing. In such an arrangement, the force of gravity can be thought of as distributed over the entire surface of the cover, or concentrated at its centroid. In either case, the force is not exerted principally at the periphery, as recited


in the claims, and the device does not have a ledge that forces the cover away from the vessel, as recited in the claims.

Because neither of the cited references (nor their combination) teaches each of the elements of Applicants' claims, the claimed invention would not have been obvious to one of ordinary skill in the art at the time that the invention was made. Absent a *prima facie* case of obviousness, the Examiner's rejection should be withdrawn.

Applicants submit that the present application is in condition for immediate allowance, and an early notification to this effect is earnestly solicited.

The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment to Deposit Order Account No. 11-0855.

Respectfully submitted,



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